

28

W.O. # 4603-22-28

1 of 40

1.0 Key Personnel (Continued)

WESTON Representatives

Organization/Branch	Name/Title	Address	Telephone
WESTON / Houston	John DiFilippo Zone Manager	5599 Sam Felipe, Site 70D Houston, TX 77056	713-621-1621
WESTON / Houston	Barry Simmons Project Manager SHSC		
WESTON / Houston	Steve Mitchell ASST Geologist II		
WESTON / Houston	Bruce Anderson Asst Engineer II		
WESTON / Houston	Arlin Howles (Project Manager)	Same	Same

Roles and Responsibilities: The WESTON field inspection team will meet and interview site representatives, and tour the site (walking) to complete the necessary reconnaissance for the preliminary assessment.

(WESTON Subcontractors) W/A

Organization/Branch	Name/Title	Address	Telephone

Roles and Responsibilities:

2.2 Site Specific Health and Safety Personnel

The SHSC for activities to be conducted at this site is Barry Simmons

The Site Health and Safety Coordinator (SHSC) has total responsibility for ensuring that the provisions of this Site HASP are adequate and implemented in the field. Changing field conditions may require decisions to be made concerning adequate protection programs. Therefore, the personnel assigned as SHSC's are experienced and meet the additional training requirements specified by OSHA in 29 CFR 1910.120

Qualifications: 40hr course / First Aid & CPR / Field Experience / SHSC course / Level CS/OT Certified SHSC

Designated alternatives include: Greg Braddy and Arlin Howles.

II. Health and Safety Evaluation

A. Hazard Assessment

1. Background Review: Complete () Partial (X) If partial, why? WESTON is completing the preliminary assessment/inspection of this site. The site representative reports that no hazardous substances are on-site that could be a health and safety concern; but this is unverified.

2. Activities Covered Under this Plan

No.	Task/Subtask	Description	(Week of) Schedule
1	1	SITE VISIT FOR INTERVIEW/INSPECTION/PHOTOGRAPH PURPOSES	12/9/91
		* [Note that No intrusive / sampling activities will be completed during this site visit]	

3. Types of Hazards: (Place a Y/N in each () to indicate presence/absence of hazard)

a. PhysioChemical (N) Flammable (N) Explosive (N) Corrosive (N) Reactive
(N) O₂ Rich (N) O₂ Deficient [1]*

Chemically Toxic (N) Inhal. (N) Ingest. (N) Cont. (N) Absorb.
(N) Carcin. (N) Mutagen (N) Terat.
(N) OSHA 1910.1000 Substance
(N) OSHA Specific Hazard. Sub. Standard, Describe _____

b. Biological (N) Etiol. Agent (N) Other - Plant, insect, animal, [2]*

c. Radiation Ionizing - (N) Internal Exposure (N) External exposure [3]*
Non-ionizing - (N) UV; (N) IR; (N) RF; (N) Microw; (N) LASER

d. Physical Hazards () [4]* e. Construction Activities () [5]*

* The number in the [] refers to one of the following hazard evaluation forms. Complete hazard evaluation forms for each appropriate Hazard Class.

B. Source/Location of Contaminants and Hazardous Substances

1. Directly Related to Tasks

(N) Air _____; (N) Soil _____;
(N) Other Surface _____; (N) S. Water _____;
(N) G. Water _____; (N) Other _____.

2. Indirectly Related to Work - Nearby Process(s) which could affect team members:

(N) Client Facility; (N) Nearby Non-client Facility. Describe _____

(N) Client briefing arranged.

[1] Chemical Hazards (None Known or anticipated)

[a] Identify and attach Material Safety Data Sheets for all reagent type chemicals, solutions or other materials identified as or which in normal use could produce hazardous substances used in performing tasks related to tasks related to this project. () N/A

[b] Chemical Contaminants of Concern () N/A If present, provide following data.

Hazardous Substance/ Tasks	Physical Properties and Characteristics*	Exposure Limits PEL/TLV**	Route(s) of Exposure***/ Symptoms	Monitoring Instruments/IP+ & Response
-------------------------------	---	------------------------------	---	---

(*) State _____

pH ___ FP ___ LEL ___ UEL ___

Auto.Ig ___ BP ___ MP ___

Incompatible with -

Sp.Gr ___ Vap.D ___

Vap.P ___ H2O Sol. ___

Oth. _____, _____

(*) State _____

pH ___ FP ___ LEL ___ UEL ___

Auto.Ig ___ BP ___ MP ___

Incompatible with -

Sp.Gr ___ Vap.D ___

Vap.P ___ H2O Sol. ___

Oth. _____, _____

* E = Explosive, F = Flammable, C = Corrosive, R = Reactive, W = Water reactive, O = Oxid. Ra = Radioactive. State = Normal physical state at site/proj. temp.

** Use lowest of two, if no TLV/PEL, use Toxicity data in following order: Lowest Toxic C humans (LTC-HMN), Lowest Lethal Conc. in humans (LLC-HMN), Lowest Toxic Dose in humans (LTD-HMN), Lowest Lethal Dose in humans (LLD-HMN), LC50 or LD50 in humans, the Lowest Toxic Concentr. in humans, the lowest LC50 or LD50 in animals.

*** I = Inhalation, G = Ingestion, S = Skin Absorption, C = Contact, D - Direct Penetration

+ IP = Ionization Potential

[2] Biological Hazards Of Concern (None known or anticipated)

No.	Hazard	Task No. (s) *	Location/ Source (K,S) **	Route of Exposure (I,G,C,D) +	Team Member(s) Allergic?	Immunization Required?
	(Y/N)					
1.	Poisonous Plants ()					
2.	Insects ()					
3.	Snakes, Reptiles ()					
4.	Animals ()					
5.	Sewage ()					
6.	Etiologic Agents () (List)					

* List all task Nos. which would involve potential exposure to these hazard(s).

** K = Known, S = Suspect. + I = Inhalation, G = Ingestion, C = Contact, D = Direct Penetration (Bite, Inject., Open wound or sore)

[3] Radiation Hazards of Concern (None known or Anticipated)

TYPE

1. Ionizing

	Location/ Source	TYPE EMITER	TASK NO. (S)	EXPOSURE LIMITS	Protection Protocol REFERENCE
RadioNuclide					

2. Non-ionizing

	Location/ Source	TASK NO. (S)	EXPOSURE LIMITS	Protection Protocol REFERENCE
Ultra violet				
Infra Red				
Microwave				
Radio-Freq.				
LASER				

[4] Physical Hazards of Concern (None Known or Anticipated)

	Hazard (Y/N)	TASK No(s).	Protection OP(s) Attached
1. Noise	()		
2. Heat - ambient air	()		
- Hot Process - Steam	()		
- Hot Process - LT ³	()		
- Hot Process - Incin.	()		
3. Cold	()		
4. Rain	()		
5. Snow	()		
6. Electric Storms	()		
7. Confined Space Entry	()		
8. "Hot Work"	()		
9. Heavy Manual Lifting/Moving	()		
10. Rough Terrain	()		
11. Housekeeping	()		
12. Structural Integrity	()		
13. Neighborhood	()		
14. Remote Area	()		
15. Compressed Gases	()		
16. Diving	()		
17. Using Boats	()		
18. Working over Water	()		
19. Traffic	()		
20. Explosives	()		
21. Heavy Equipment Operation	()		
22. Lifting Equipment Operation. - Cranes, - Manlifts	()		
23. Working at Elevation	()		
24. Using Ladders	()		
25. Using Scaffolding	()		
26. Excavating/Trenching	()		
27. Materials Handling	()		
28. Haz. Mat. Use/Storage - flam.liq./gases	()		
- oxidizers	()		
- corrosives	()		
29. Fire Prevent/Reponse plan required	()		
30. Fire Extinguishers required	()		
31. Demolition	()		
32. Utilities - Underground	()		
- Overhead	()		
33. Electrical - General	()		
- High Voltage	()		
34. Welding/cutting/burning	()		
35. Hand tools	()		
36. Power Hand Tools	()		
37. High Pressure Water	()		
38. Other <u>SIF</u>	(✓)	1	No FLD
39. Other	()		
40. Other	()		

SITE INSPECTION ONLY

TASK BY TASK RISK ANALYSIS

The preceding Tables identify the hazards known or suspected to be present in accomplishing the tasks involved in this project.

Section II A. 2. of this HASP describes the background of this site/project and identifies the tasks involved.

Below briefly describe each task and the likelihood of exposure to the hazards identified and the protective protocols to be used.

1.

TASK 1 Site Inspection (Preliminary Assessment)

The two WESTON field personnel, Steve Mitchell & Bruce Anderson, will walk across the site to observe Site features and note any signs of visual contamination or any potential waste sources. No sampling will be completed during this inspection. The field team will be escorted by a site representative who is familiar with the site. The likelihood of exposure to any chemical or biological or radiological hazard is expected to be practically non-existent since these hazards are not reported to be present on site. However, the WESTON team will will dress in a modified level-D and carry an FID to perform air monitoring during the investigation. The WESTON team will withdraw from areas of the site exhibiting ≥ 5 ppm reading on the FID; The potential for exposure to minor physical hazards is more likely. WESTON personnel will avoid all areas/activities which would result in exposure to a physical hazard that is imminently dangerous. A GM RADIOMETER WILL ALSO PERFORM AIR MONITORING DURING THE INVESTIGATION. THE WESTON TEAM WILL WITHDRAW FROM AREAS OF SITE EXHIBITING $> 3 \times$ BACKGROUND.

III. Personnel Protection Plan

A. Engineering Controls

1. Describe Engineering Controls used as part of Personnel Protection Plan:

Task(s)

None

B. Administrative Controls

1. Describe Administrative controls used as part of Personnel Protection Plan:

Task(s)

None

C. Personnel Protective Equipment *

1. Action Levels for Changing Levels of Protection

(1) Task No. (s) Define Action Levels for up or down grade for each task

For all field work, the WESTON team will evacuate the
site if an FID response of ≥ 5 units is measured
in the breathing zone atmosphere.

BENZENE IS NOT EXPECTED TO BE PRESENT AT THIS SITE, THEREFORE
THE BLANKET ACTION LEVEL OF 5 ppm FOR ORGANIC VAPORS WILL
BE OBSERVED.

c. Description of Levels

Task(s)	<u>SITE INSPECTION</u>			
	Level D		Level D	
Head	<input checked="" type="checkbox"/> <u>Hard Hat</u>	()	()	()
Eye & Face	<input checked="" type="checkbox"/> <u>Safety Glasses</u>	()	()	()
Hearing	() <u>Site operations (if any)</u>	()	()	()
Arms & Legs only	()	()	()	()
Whole Body Apron	<input checked="" type="checkbox"/> <u>Tyvek or</u>	()	()	()
	() <u>coveralls</u>	()	()	()
Hand - gloves	<input checked="" type="checkbox"/> <u>Latex Surgical</u>	()	()	()
- gloves	()	()	()	()
- gloves	()	()	()	()
Foot - Boots	<input checked="" type="checkbox"/> <u>Steel Toed</u>	()	()	()
- Boots	<input checked="" type="checkbox"/> <u>Rubber</u>	()	()	()
- Boots	()	()	()	()

Pg 9 is not
needed for
this HASP.

IV. Site or Project Hazard Monitoring Program

A. Direct Reading Air Monitoring Instruments

1. Instrument Selection & Initial Check Record

	No.	Task No. (s)	Instrument checked upon receipt	Initials
OGI-	()	_____	()	_____
O ₂ -	()	_____	()	_____
OGI/O ₂ -	()	_____	()	_____
OGI/O ₂ /tox-PPM, H ₂ S, H ₂ S/CO	()	_____	()	_____
RAD-GM,	(*)	Site Inspection	()	_____
-NaI	()	_____	()	_____
-ZnS	()	_____	()	_____
-OTHER _____	()	_____	()	_____
PID -HNU 10.2	()	_____	()	_____
-HNU 11.7	()	_____	()	_____
-HNU 9.5,	()	_____	()	_____
-PHOTOVAC, TMA, OTHER	()	_____	()	_____
FID -FOX-128	(*)	Site Inspection	()	_____
-FOX 128GC	()	_____	()	_____
-HEATH, AID, OTHER _____	()	_____	()	_____
RAM, Mini-RAM, Other _____	()	_____	()	_____
MONITOX-HCN	()	_____	()	_____
H ₂ S	()	_____	()	_____
COCL,	()	_____	()	_____
SO ₂ ,	()	_____	()	_____
OTHER _____	()	_____	()	_____
Bio-Aerosol Monitor	()	_____	()	_____
Detector Tubes				
Pump - MSA, Draeger, Sensidyne	()	_____	()	_____
- Tubes(No.)/type	()	_____ ()	()	_____
- Tubes(No.)/type	()	_____ ()	()	_____

Reporting Format ____1.Field notebook. ____2.Field data sheets. ____3.Air monitoring log. ____4.Trip report. ____5.Other:

Site Air Monitoring Program

Air Monitoring Instrument FID

Air Monitoring Frequency

Tasks

1. Periodically _____
2. Periodically _____
* 3. Continuous _____
4. Other: _____

Monitoring Locations

Tasks

- X 1. Upwind/downwind of site activities.
2. Near residents, etc.
3. Key site activity locations:
 _____ decon area
 _____ staging area
 _____ excavation area
 _____ field lab area
 _____ storage tanks
 _____ lagoons
 _____ drums

4. Fixed stations
X 5. Other: Immediate vicinity of
field inspection team at breathing zone level

Air Monitoring Instrument GM Radiometer

Air Monitoring Frequency

Tasks

1. Periodically _____
2. Periodically _____
X 3. Continuous _____
4. Other: _____

Monitoring Locations

Tasks

- X 1. Upwind/downwind of site activities.
2. Near residents, etc.
3. Key site activity locations:
 _____ decon area
 _____ staging area
 _____ excavation area
 _____ field lab area
 _____ storage tanks
 _____ lagoons
 _____ Drums

4. Fixed stations
X 5. Other: Immediate vicinity
of field inspection team @
Both Breathing & Ground Zone Levels

D. Action Levels

1. Explosive atmosphere:

Action Level

<10% LEL

10%-25% LEL

>25% LEL

Tasks

Action

Continue investigation

Continue on-site monitoring with extreme caution as higher levels are encountered.

Explosion hazard.
Withdraw from area immediately.

2. Oxygen:

Action Level

<19.5%

19.5%-25%

>25%

Tasks

Action

Monitor wearing SCBA.

NOTE: Combustible gas readings may not be valid in atmospheres with <19.5% oxygen.

Continue investigation with caution, as Oxygen levels > 21% require extreme caution. Other than normal level may be due to presence of other substances.

Fire hazard potential. Stop work and Consult a fire safety specialist.

3. Radiation:

Action Level

3 x Bkg - <2 mR/hr

> 2 mrem/hr

Tasks SITE INSPECTION

Action

Radiation above background levels (normally 0.01-0.02 mR/hr) signifies possible source(s) radiation present.

Continue investigation with caution. Perform thorough monitoring. Consult with a health physicist.

Potential radiation hazard. Evacuate site. Continue investigation only upon the advice of a health physicist.

* 4. Organic gases and vapors: Leave area ≥ 5 ppm on FID (OVA)

5. Inorganic gases and vapors:

Action Level

Depends on chemical

Action

Consult standard reference manuals for air concentration/ toxicity data. Action level depends on PEL/REL/TLV.

These Action Levels, if not defined by regulation, is some percent (usually 50%) of the applicable PEL/REL/TLV. That number must also be adjusted to account for instrument response factors.

Pg 14 - 19 ARE NOT
NEEDED FOR THIS
PROJECT

IV. DECONTAMINATION PLAN

1. Personnel Decontamination

Section III C. lists the tasks and specific levels of protection required for each. Consistent with the levels of protection required, step by step procedures for personnel decontamination for each Level of Protection are attached.

2. Levels of Protection Required for Decontamination Personnel

The levels of protection required for personnel assisting with decontamination will be [Level B, Level C, X Level D].

(CHECK) Modifications include: _____

4. Equipment Decontamination

A procedure for decontamination steps required for non-sampling equipment and heavy machinery follows: _____

5. Sampling Equipment Decontamination

Sampling equipment will be decontaminated in accordance with the following procedure:

 Wipe down w/ moist cloth

3. Disposition of Decontamination Wastes

(Provide a description of waste disposition including identification of storage area, hauler, and final disposal site if applicable.)

 BAGGED / TAKEN AWAY BY EPA

V. Contingencies

A. Emergency Contacts and Phone Numbers

Agency	Contact	Phone Number
Local Medical Emergency Facility		440 2146
WESTON Medical Emergency Contact	AGATHA	(513) 421-3063
WESTON Health and Safety		(215) 430-7406
Fire Department	911	(911)
Police Department	911	(911)
On Site Coordinator	Barry Simmons	(713) - 621-1620
Site Telephone	-	-
Nearest Telephone	-	-
	(Location)	TO BE DETERMINED

B. LOCAL MEDICAL EMERGENCY FACILITY(S)

1. Primary

Name of Hospital Northwest Houston Medical Center

Address: 710 FM 1960 WEST Phone No. 440-1000

Name of Contact ER Phone No. 440-2146

Type of Service - Physical Trauma only () Chemical Exposure only ()
Physical Trauma & Chemical Exposure () Available 24 Hours ()

Route to Hospital: (Attach Map) WEST ON FARRELL ROAD NORTH ON HARDY ROAD
WEST on 1960, Pass three lights, Hospital
is on right.

Travel Time From Site (Minutes) _____ Distance to Hospital (Miles) _____ Name/No. of 24 Hr. Ambulance Service _____

2. Secondary or Specialty Services Provider

Name of Hospital _____

Address: _____ Phone No. _____

Name of Contact _____ Phone No. _____

Type of Service - Physical Trauma only () Chemical Exposure only ()
Physical Trauma & Chemical Exposure () Available 24 Hours ()

Route to Hospital: (Attach Map) _____

Travel Time From Site (Minutes) _____ Distance to Hospital (Miles) _____ Name/No. of 24 Hr. Ambulance Service _____

MAP TO HOSPITAL

↑ TO SPRING ↓



NW HOUSTON
MED. CENTER



FM 1960

LONE STAR SCREEN



I-45

SW HARDY DEVL.



FARRELL ROAD

AIRPORT HOLDING A

HOUSTON
INTERCONTINENTAL
AIRPORT

HARDY ROAD

RESERVED



WISCHER



RANKIN ROAD

↓ TO HOUSTON ↓

VI. Site Personnel and Certification Status

A. WESTON

Name	Title	Task(s)	Medical	Fit Test		Training	Certification
			Current	Qual.	Quant.	Current	Level or Description
			a.	b.	b.	c.	
1. Steve Mitchell	Asst Geol II	Site Visit	(Y)	(Y)	()	(Y)	(B-T)
2. Bruce Anderson	Asst ENGR II	Site Visit	(Y)	(Y)	()	(Y)	(B-T)
3.			()	()	()	()	()
4.			()	()	()	()	()
5.			()	()	()	()	()
6.			()	()	()	()	()
7.			()	()	()	()	()
8.			()	()	()	()	()
9.			()	()	()	()	()
10.			()	()	()	()	()
11.			()	()	()	()	()
12.			()	()	()	()	()
Site Health and Safety Coordinator (SHSC)							
14. Barry Simmons	Project Manager		(Y)	(Y)	()	(Y)	(L-5/B-T)

(a) Training - All personnel, including visitors, entering the exclusion or contamination reduction zones must have certifications of completion of training in accordance with OSHA 29 CFR 1910.29, CFR 1926/1910 or 29 CFR 1910.120.

(b) Respirator Fit Testing - All persons, including visitors, entering any area requiring the use or potential use of any negative pressure respirator must have had as a minimum, a qualitative fit test, administered in accordance with OSHA 29 CFR 1910.134 or ANSI within the last 12 months. If site conditions require the use of a full face negative pressure, air purifying respirator for protection from Asbestos or lead, employees must have had a Quantitative fit test, administered according to OSHA 29 CFR 1910.1002 or 1025 within the last 6 months.

(c) Medical Monitoring Requirements - All personnel, including visitors, entering the exclusion or contamination reduction zones must be certified as medically fit to work, and to wear a respirator, if appropriate, in accordance with 29 CFR 1910, 29 CFR 1926/1910 or 29 CFR 1910.120.

The Site Health and Safety Coordinator is responsible for verifying all certifications and fit tests.

VII. HEALTH AND SAFETY PLAN APPROVAL/SIGN OFF FORMAT

1. Site Name Airport Landing A 2. WO# 4603-22-28
 Work Location Address FARRELL Rd HOUSTON TX 77073
 (Street Address) (City) (State) (Zip)

I have read, understood, and agreed with the information set forth in this Health and Safety Plan (and attachments) and discussed in the Personnel Health and Safety briefing.

<u>Barry Simmons</u> Site Safety Co-ordinator	<u>Barry E. Simmons</u> Signature	Date
Name	Signature	Date
Name	Signature	Date
Name	Signature	Date
Name	Signature	Date
Name	Signature	Date
Name	Signature	Date
Name	Signature	Date
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Name	Signature	Date

VIII. Training and Briefing Topics

The following items will be covered at the site specific training meeting, daily or periodically.

The HASP and relative site features will be discussed at the site perimeter before completing reconnaissance on-site

Site Specific Training Meeting	Daily	Periodically	
X	X		Site characterization and analysis, Sec. 3.0; 29 CFR 1910.120 i.
			Physical hazards, Table 3.2.
			Chemical hazards, Table 3.1.
X	X		Animal bites, stings and poisonous plants.
			Etiologic (Infectious) Agents.
			Site control, Sec. 8.0; 29 CFR 1910.120 d.
			Engineering controls and work practices, Sec. 8.5; 29 CFR 1910.120 g.
			Heavy Machinery.
			Forklift
			Backhoe
			Equipment
X	X		Tools
			Ladder 29 CFR 1910.27 d.
			Overhead and Underground Utilities
			Scaffolds
			Structural Integrity
			Unguarded Openings-wall, Floor, Ceilings (?)
			Pressurized Air Cylinders
			Personnel Protective Equipment, Sec. 5.0; 29 CFR 1910.120 g; 29 CFR 1910.134

Attachment 1. Level D/Modified Level D Decontamination
[Check indicated Functions or add steps as necessary]

STEP	FUNCTION	DESCRIPTION OF PROCESS, SOLUTION AND CONTAINER
()	Segregated equipment drop	
()	Boot cover and glove wash	
()	Boot cover and glove rinse	
()	Tape removal - outer glove and boot	
()	Boot cover removal	
()	Outer glove removal	
		HOT-LINE
()	Suit/safety boot wash	
()	Suit/boot/glove rinse	
()	Safety boot removal	
()	Suit Removal	
()	Inner glove wash	
()	Inner glove rinse	
()	Inner glove removal	
()	Inner clothing removal	
		CRC/SAFE ZONE BOUNDARY
()	Field wash	<i>WIPE BOOTS DOWN WITH WASH CLOTH</i>
()	Redress	

DISPOSAL PLAN:

END OF DAY: *BIG WASH CLOTH, GLOVES, & OTHER SOLID WASTE*

END OF WEEK: *PUMP LIQUID WASTE AWAY*

END OF PROJECT: _____